

# Notice of Allowability

Application No.

10/772,019

Examiner

Jeff Natalini

Applicant(s)

CARPENTER, KEVIN

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to telephone interview on 12/15/05.
2. ☒ The allowed claim(s) is/are 1-10, 32, 33 and 35-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |                                                                                                                     |                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)                                                    | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>20051215</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                          |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance                                    |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____                                                                      |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 1-10, 32, 33, and 35-39 are allowed.

## **EXAMINER'S AMENDMENT**

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 1:

On line 13 of the claim (the 5<sup>th</sup> paragraph) after "a former voltage level" the "," has been changed to a ";

The 7<sup>th</sup> paragraph, starting with "means for audibly indicating a ..." has been moved to follow the 5<sup>th</sup> paragraph, and thus now come before paragraph 6. At the end of this paragraph after "fixed value of conductance" the "." has been changed to ";

The 6<sup>th</sup> paragraph ("wherein said sudden changes in voltage") now the last paragraph in the claim, therefore at the end of the paragraph after "audibly indicating a sudden change" the ": and" has been replaced with a "."

The following is a marked up version of claim 1:

1. (currently amended): An apparatus for tracing electrical shorts in a wiring circuit under test, comprising:

means for producing a continuous source of substantially fixed current flow into a wiring circuit under test, said means for producing current configured for establishing an electrical connection to the wiring circuit anywhere along the length of the wiring circuit;

means for continuously monitoring voltage across said circuit under test, said means comprising,

a comparator circuit adapted to detect a plurality of sudden changes in applied voltage in response to said substantially fixed current flow,

a charge storage capacitor coupled to a first input of said comparator circuit configuring said comparator circuit to detect a first direction of voltage change in the wiring circuit in relation to a former voltage level; and

~~wherein said sudden changes in voltage are detected in response to voltage changes in the wiring circuit which exceed a predetermined voltage change within a given length of time and are communicated to said means for audibly indicating a sudden change; and~~

means for audibly indicating a sudden change in circuit conductance, in relation to a preceding value of conductance and not a fixed value of conductance;

wherein said sudden changes in voltage are detected in response to voltage changes in the wiring circuit which exceed a predetermined voltage change within a

given length of time and are communicated to said means for audibly indicating a sudden change.

Authorization for this examiner's amendment was given in a telephone interview with John O'Banion on December 15, 2005 (see attached PTOL-413).

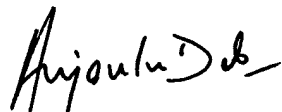
### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



ANJAN DEB  
PRIMARY EXAMINER